AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An optical modulator comprising: an optical waveguide formed of a dielectric material having electrooptical effect and formed of $(Pb_{1-w}M_w)(Zr_{1-x-y}Ti_xSn_y)_zO_3$ (wherein $0 \leq w \leq 0.5$, $0 < x \leq 0.5$, $0 < y \leq 0.5$, $0.8 \leq z \leq 1.2$; and M is one kind, or two or more kinds of elements selected from the group consisted of lanthanum, niobium, tantalum, barium and strontium; and electrodes opposed to each other across the optical waveguide, an electric field being applied between the electrodes to change a refractive index of the dielectric material to thereby control a propagating direction of a signal light propagating in the optical waveguide,

the dielectric material having a first refractive index in its initial state, having a second refractive index by application of an electric field of a first polarity, and retaining a third refractive index obtained after the electric field has been removed, and

the dielectric material having the third refractive index having the first refractive index by the application of an electric field of a second polarity different from the first polarity and removal of the electric field.

Claim 2 (currently amended): An optical deflector comprising: an optical waveguide formed of a dielectric material having electrooptical effect and formed of $(Pb_{1-w}M_w)(Zr_{1-x-y}Ti_xSn_y)_zO_3$ (wherein $0 \leq w \leq 0.5$, $0 < x \leq 0.5$, $0 < y \leq 0.5$, $0.8 \leq z \leq 1.2$; and M is one kind, or two or more kinds of elements selected from the group consisted of lanthanum, niobium, tantalum, barium and strontium; and electrodes opposed to each other across the optical waveguide, an electric field being applied between the electrodes to change a refractive index of the dielectric material to thereby control a propagating direction of a signal light propagating in the optical waveguide,

the dielectric material having a first refractive index in its initial state, having a refractive index changed to a second refractive index by application of an electric field of a first polarity, and retaining a third refractive index obtained after the electric field has been removed, and

the dielectric material having the third refractive index having the first refractive index by the application of an electric field of a second polarity different from the first polarity and removal of the electric field.

Claim 3 (currently amended): An optical deflector comprising: an optical waveguide formed of a dielectric material having electrooptical effect and formed of $(Pb_{1-w}M_w)(Zr_{1-x-y}Ti_xSn_y)_zO_3$ (wherein $0 \leq w \leq 0.5$, $0 < x \leq 0.5$, $0 < y \leq 0.5$, $0.8 \leq z \leq 1.2$; and M is one kind, or two or more kinds of elements selected from the group consisted of lanthanum, niobium, tantalum, barium and strontium; and electrodes opposed to each other across the optical waveguide, an electric field being applied

between the electrodes to change a refractive index of the dielectric material to thereby control a propagating direction of a signal light propagating in the optical waveguide,

having a first deflection angle in its initial state, having a second deflection angle by application of an electric field of a first polarity, and retaining a third ~~reflection~~ deflection angle obtained after the electric field has been removed, and

having the first ~~reflection~~ deflection angle by the application of an electric field of a second polarity different from the first polarity in a state having the third ~~reflection~~ deflection angle and removal of the electric field.

Claims 4-5 (canceled).

Claim 6 (original): An optical deflector comprising:

a slab waveguide formed on a substrate and formed of $(Pb_{1-w}M_w)(Zr_{1-x-y}Ti_xSn_y)_zO_3$ (wherein $0 \leq w \leq 0.5$, $0 < x \leq 0.5$, $0 < y \leq 0.5$, $0.8 \leq z \leq 1.2$; and M is one kind, or two or more kinds of elements selected from a group consisted of lanthanum, niobium, tantalum, barium and strontium); and

an electrode formed on the slab waveguide,

an electric field being applied to the slab waveguide by applying a prescribed voltage to the electrode to change a refractive index of the slab waveguide so as to control a propagating direction of a signal light propagating in the slab waveguide.

Claim 7 (original): An optical deflector according to claim 6, wherein

the electrode is formed in a shape of a wedge, and a signal light entering the optical waveguide is deflected by electrooptical prism effect.

Claim 8 (original): An optical deflector according to claim 6, wherein

the electrode is sectioned in n-pieces of discrete electrodes (wherein n is an integer and not less than 1), and constitute a prism group for controlling a deflection angle of the signal light in n+1 ways.

Claim 9 (withdrawn): An optical switch comprising:

a slab waveguide formed of $(Pb_{1-w}M_w)(Zr_{1-x-y}Ti_xSn_y)_zO_3$ (wherein $0 \leq w \leq 0.5$, $0 < x \leq 0.5$, $0 < y \leq 0.5$, $0.8 \leq z \leq 1.2$; and M is one kind, or two or more kinds of elements selected from a group consisted of lanthanum, niobium, tantalum, barium and strontium);

an input waveguide optically coupled to the slab waveguide, for inputting signal light to the slab waveguide;

an optical deflector having electrodes opposed to each other across the slab waveguide, for applying an electric field to the slab waveguide to change a refractive index to thereby control a propagating direction of the signal light propagating in the slab waveguide; and

a plurality of output waveguides optically coupled to the slab waveguide, for outputting the

signal light through the slab waveguide,

the signal light inputted to the input waveguide being outputted to an arbitrary one of the output waveguides.

Claim 10 (withdrawn): An optical switch according to claim 9, wherein

the optical deflector includes at least a couple of said electrodes which are in a triangular shape and arranged with the vertical angles directed in directions opposite to each other so as to constitute a prism pair in the slab waveguide.

Claim 11 (withdrawn): An optical switch according to claim 9, wherein

the electrode includes a plurality of triangular discrete electrodes, and selects the output waveguides, based on a number of the discrete electrodes to which a voltage is applied.

Claim 12 (withdrawn): An optical switch according to claim 11, wherein

the electrode is divided into n-1 pieces discrete electrodes when a number of the output waveguides is n.

Claim 13 (withdrawn): An optical switch according to claim 9, wherein

the optical deflector includes a first optical deflector disposed on the side of the input waveguide, and a second optical deflector disposed on the side of the output waveguides.

Claim 14 (withdrawn): An optical switch according to claim 9, further comprising:

a lens disposed between the input waveguide and the slab waveguide, for forming the signal light entering the input waveguide into substantially parallel beams and passing the beams into the slab waveguide.

Claim 15 (withdrawn): An optical switch according to claim 9, further comprising:

a lens disposed between the slab waveguide and the output waveguide, for condensing the signal light exiting the slab waveguide to the output waveguide.

Claim 16 (currently amended): A deflection direction control method for an optical deflector comprising: an optical waveguide of a dielectric material having electrooptical effect and formed of $(Pb_{1-w}M_w)(Zr_{1-x-y}Ti_xSn_y)_zO_3$ (wherein $0 \leq w \leq 0.5$, $0 < x \leq 0.5$, $0 < y \leq 0.5$, $0.8 \leq z \leq 1.2$; and M is one kind, or two or more kinds of elements selected from the group consisted of lanthanum, niobium, tantalum, barium and strontium; and a pair of electrodes opposed to each other across the optical waveguide, for applying an electric field between the pair of electrode to change a refractive

index of the dielectric material to thereby control a propagating direction of a signal light propagating in the optical waveguide, wherein

an electric field of a first polarity is applied to the dielectric material of a first refractive index in its initial state and removing the electric field to thereby make the refractive index of the dielectric material to be a second refractive index different from the first refractive index, whereby a deflection direction of the signal light is changed.

Claim 17 (original): A deflection direction control method for an optical deflector according to claim 16, wherein

an electric filed of a second polarity different from the first polarity is applied to the dielectric material having the second refractive index and removing the electric field to thereby make the refractive index of the dielectric material to be the first refractive index, whereby a deflection direction of the signal light is changed.